

3. (Not Amended) The current source switching circuit according to claim 2, further comprising:

a load connected between a ground and a second side of said transistor switch.

4. (Not Amended) The current source switching circuit according to claim 3, wherein:

said load is a charging capacitor.

5. (Not Amended) The current source switching circuit according to claim 1, wherein said transistor switch comprises:

a MOS transistor.

6. (Not Amended) The current source switching circuit according to claim 1, wherein said transistor switch comprises:

a first serial combination of a functional MOS transistor with a first compensating transistor connected to a source of said functional MOS transistor and a second compensating transistor connected to a drain of said functional MOS transistor.

7. (Not Amended) The current source switching circuit according to claim 6, wherein said transistor switch further comprises:

a second serial combination of a complementary functional MOS transistor with a first complementary compensating transistor connected to a source of said complementary functional MOS transistor and a second complementary compensating transistor connected to a drain of said complementary functional MOS transistor.

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8. (Amended) The current source switching circuit according to claim 1, wherein said [pulling] pull-down mirror path comprises:
a pull-down amplifier.

9. (Not Amended) The current source switching circuit according to claim 8, wherein:
said pull-down amplifier is configured as a voltage follower to have an output which follows a current source side of said switch.

10. (Amended) The current source switching circuit according to claim 8, further comprising:
a complementary pull-down mirror path transistor switch, said complementary pull-down mirror path transistor switch being adapted for operation opposite to that of said transistor switch.

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11. (Amended) The current source switching circuit according to claim 10, wherein said complementary pull-down mirror path transistor switch comprises:
a series combination of a functional transistor with a respective compensating transistor connected to either side of said functional transistor.

12. (Not Amended) The current source switching circuit according to claim 2, wherein said current source comprises:
a MOS transistor.

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13. (Amended) The current source switching circuit according to claim 1, wherein said [pulling] pull-down mirror path comprises:
a pull-up amplifier.

14. (Not Amended) The current source switching circuit according to claim 13, further comprising:

a current source connected between a ground and a first side of said transistor switch.

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15. (Amended) The current source switching circuit according to claim [13]2, further comprising:

a current sink connected between a ground and a second side of said transistor switch.

16. (Not Amended) The current source switching circuit according to claim 15, wherein said current sink comprises:

a MOS transistor.

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17. (Amended) The current source switching circuit according to claim 16, wherein said current source switching circuit comprises:

a charged capacitor.

18. (Amended) A method of reducing charge injection from a current source through a current switch into a load, said method comprising:

providing a pull-down mirror path in parallel with said current switch;

turning a switch in said pull-down mirror path on when said current switch is turned off; and

turning said switch in said pull-down mirror path off when said current switch is turned on[.].

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wherein said current switch and said pull-down mirror path operate substantially continuously to reduce charge injection flowing to said load.

19. (Not Amended) The method of reducing charge injection from a current source through a current switch into a load according to claim 18, wherein:

said current source is a MOS transistor.

20. (Not Amended) The method of reducing charge injection from a current source through a current switch into a load according to claim 18, wherein:

said current source is a charged capacitor.

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21. (Amended) A method of switching a current source out from a load, said method comprising:

opening a transistor switch connecting said current source to said load; and

substantially simultaneously with said step of opening, closing a switch to a pull-down mirror path in parallel with said transistor switch so that current from said current source flows through said pull-down mirror path;

wherein said load substantially continuously receives said current flowing from said current source to reduce charge injection from said current source to said load when said transistor switch is opened[is greatly reduced].

22. (Amended) Apparatus for switching a current source out from a load, comprising:

means for opening a transistor switch connecting said current source to said load; and

means for closing a switch to a pull-down mirror path in parallel with said transistor switch at substantially simultaneously a same time as said means for opening opens said transistor switch so that current from said current source flows through said pull-down mirror path;

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wherein said load substantially continuously receives said current flowing from said current source and charge injection from said current source to said load when said transistor switch is opened is [greatly] reduced.
